

Land titling policy and soil conservation in the northern uplands of Vietnam¹

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EXTENDED ABSTRACT

In Vietnam, a quasi-private property regime has been established in 1993 with the issuance of exchangeable and mortgageable long-term land use right certificates. The program has been one of the biggest ever implemented in the developing world, and its implementation has been a long and costly process, particularly in mountainous areas where the law has been partly opposed by ethnic minorities.

Using primary qualitative and quantitative data collected in Yen Chau, a mountainous district of Northern Vietnam, this paper investigates the role of the land policy in the adoption of soil conservation technologies by farmers. This issue is of crucial importance in the region where population growth and growing market demands have induced farmers to intensify agricultural production. While poverty has been reduced, environmental problems such as soil erosion, landslides, and declining soil fertility have become more severe over the past years.

Our study firstly shows that in Yen Chau the state maintains substantial control over land resources by periodically carrying out land reallocations, thus sending contradictory signals to farmers and contributing to a perception of tenure insecurity despite the existence of land use right certificates. Descriptive analysis and qualitative data suggest that despite farmers' awareness of erosion, soil conservation technologies are perceived as being economically unattractive, due to competition with the predominant cash crop which is maize. Therefore, most upland farmers continue to practice the prevailing erosion-prone cultivation system. Finally, focusing on agroforestry as one major soil conservation option, we estimate household and plot level econometric models, using probit and selection bias correction model to account for exposure bias due to incomplete diffusion, to empirically assess the determinants of adoption. The presence of a land title positively influences adoption both at the household and plot level. We find that the possession of a formal land title positively influences adoption but that the threat of land reallocations as perceived by villages discourages adoption by creating uncertainty and tenure insecurity. This effect is even stronger when land is operated without a title. However, the positive land title effect disappears when no reallocation threat is perceived, indicating that the latter factor is a substantial one in explaining farmers' behaviour. These effects remain small in magnitude, however. Land tenure policy therefore appears as a necessary but limited tool to foster environmental protection.

We conclude that the issuance of land titles is a necessary but not sufficient prerequisite to encouraging the adoption of soil conservation practices. However, current practices remain economically unattractive to farmers. This deficiency needs to be addressed by interdisciplinary research and complemented by strong efforts by local authorities to promote sustainable land use.

Key words: Land titling policy, technology adoption, upland agriculture.